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ABSTRACT

Six questions guided a literature review of content area reading instruction in American secondary schools since 1966: (1) What is the history of reading instruction in American secondary schools through 1965? (2) Why is reading instruction at the secondary level important? (3) What are some factors both within and without secondary schools that inhibit the development of effective reading programs that involve content area reading instruction? (4) What are some of the programs that related reading to content areas and that were operative in American secondary schools between 1966 and 1981? (5) To what extent have these programs been successful? and (6) What are the trends in programs involving content area reading instruction? Analysis showed that the idea of teaching reading in the content areas could be traced back to the 1930's, but that the principal type of reading instruction has been remedial, with an expansion of developmental reading in the 1950's and 1960's. The departmentalization of the schools and teachers' lack of training have inhibited the union of reading and content instruction. Two trends in these reading programs were making the teaching of reading the responsibility of English departments and using inservice education to train content teachers how to teach reading with their own content materials. (HOD)

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A HISTORY OF READING PROGRAMS INVOLVING INSTRUCTION IN THE CONTENT AREAS, 1966-1981

A Thesis
Presented to the Graduate Faculty
Moorhead State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

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ANNOUNCEMENT OF ORAL EXAMINATION

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Thesis Abstract

The purpose of this study is to analyze the status of programs involving reading instruction in the content areas in secondary schools and determine whether there are any trends or needs which could guide educational planners in this area.

The idea of teaching reading in the content areas can be traced back to the 1930's, but the principal type of reading instruction in this country's secondary schools has been remedial. Although declining test scores, the relationship of reading to delinquency and academic success, and the need for functional literacy underscore the importance of reading instruction in secondary schools, departmentalization and teachers' lack of training have inhibited the union of reading and content instruction.

Between 1966 and 1981, several types of programs were developed to promote reading instruction in the content areas, but the percentage of schools involved was small. Many of the programs which developed contained successful elements, but these programs were generally not comprehensive. Two trends in these programs were noted: 1) assigning the responsibility for teaching reading to English departments and 2) the use of inservice education to train content teachers how to teach reading within their respective content areas.

TABLE OF CONTENTS

Chapter		Page
1.	INTRODUCTION	1
2.	BACKGROUND	7
3.	PROGRAMS OF READING INSTRUCTION WITHIN CONTENT AREAS	26
4.	EVALUATION OF PROGRAMS AND ANALYSIS OF TRENDS	46
5.	CONCLUSIONS AND RECOMMENDATIONS	60
REFERENCES		67
BIBLIOGRAPHY		73

Chapter 1

INTRODUCTION

> For many years the mice had been living in constant dread of their enemy, the cat. It was decided to call a meeting to determine the best means of handling the situation. Many plans were discussed and rejected.
>
> At last a young mouse got up. "I propose," said he, looking very important, "that a bell be hung around the cat's neck. Then whenever the cat approaches, we always shall have notice of her presence, and so be able to escape."
>
> The young mouse sat down amidst tremendous applause. The suggestion was put to a motion and passed almost unanimously.
>
> But just then an old mouse, who had sat silent all the while, rose to his feet and said: "My friends, it takes a young mouse to think of a plan so ingenious and yet so simple. With a bell about the cat's neck to warn us we shall all be safe. I have but one brief question to put to the supporters of the plan--which one of you is going to bell the cat?"
>
> Moral: IT IS ONE THING TO PROPOSE, ANOTHER TO EXECUTE. (Aesop, 1968, p. 17)

> If you have built castles in the air, your work need not be lost; that is where they should be. Now put the foundations under them. (Thoreau, 1966, p. 214)

Whether we in education see reading in the content areas as a fearsome cat to be belled or as a castle which needs to be firmly connected to the ground, one thing is clear--our work is not done.

There are many, however, who do not want to help with the work. They say, "It's not our job to build reading skills. It's the responsibility of the elementary teachers to teach the foundations of reading." They do, at least, have tradition on their side, for reading instruction and reading programs have long been the responsibility of the elementary schools. Evidence strongly indicates, however, that

many secondary students have inadequately developed reading skills and could benefit from direct reading instruction. Artley (1968) summarized the practices of secondary reading from the mid-1950's through the mid-1960's and noted that numerous studies had shown a decline in reading growth beginning at the secondary level and that the most apparent reason was the general absence of systematic reading instruction beyond that provided by the elementary schools.

Reading instruction at the secondary level has, however, become a part of the curriculum in many schools. Nila Banton Smith (1965), in up-dating her 1934 standard work on the history of reading instruction in the United States, American Reading Instruction, detailed the development of reading, primarily at elementary levels, but also chronicled the emergence of interest in reading instruction at the secondary levels after World War II and the expansion of secondary reading programs during the 1950's and early 1960's. Most of these programs, however, were designed to help only the poorer readers. Gradually, developmental reading classes for the average and above-average students developed and increased in numbers. It was discovered, nevertheless, that many students were having difficulties reading the materials assigned to them in their content classes. The idea of teaching students how to read the content materials through instruction by the content teacher had been around for years, but it had not been widely accepted, at least not by secondary content teachers. The national push for excellence in education in the late 1950's and early 1960's, it was hoped by many, would lead to instruction in the content areas as a viable means of improving the reading skills of secondary students. The Elementary and Secondary Education Act of 1965, it was thought, might spur such a

development. The problem addressed by the present study is to determine what has been the relationship between reading instruction and the content areas in American secondary schools since 1966. The purpose of the present study is to analyze the status of content area reading in secondary schools and determine whether there are any trends or needs which could guide educational planners in this area.

In achieving this purpose, the present study seeks to answer the following questions:

1. What, generally, is the history of reading instruction in American secondary schools through 1965?

2. Why is reading instruction at the secondary level important?

3. What are some factors both within and without secondary schools which inhibit the development of effective reading programs that involve reading instruction in the content areas?

4. What, specifically, are some of the programs which related reading instruction to content areas and which were operative in American secondary schools between 1966 and 1981?

5. To what extent have these programs been successful?

6. What are the trends in programs involving content area reading instruction?

Some key terms should be defined in the interests of clarity. The terms content areas, content fields, content subjects, and subject areas will be used interchangeably to mean those courses in the high school curriculum which represent divisions of knowledge (e.g., art, English, business, mathematics, physical education, science, social studies) as opposed to reading, which has no true content but is a skill used to unlock the meaning of content writing.

The term program will be used generally to mean a plan by which one works toward a designated goal. More specifically, the term reading program will be used to mean any series of instructional practices or techniques and/or organized grouping of students to receive such instruction in reading skills development.

The significance of this study is that it synthesizes in one document some of the approaches to content area reading instruction that have been tried during the last 15 years in American secondary schools, and, based on an evaluation and analysis of them, suggests some courses of future action which are likely to be the most productive in achieving the goal of reading instruction in content areas as a common practice.

The present study does, however, have some limitations. The very nature of historical research means that the researcher is limited to data that are already in existence. He cannot generate new data, but must induce generalizations and draw conclusions only from the data available. This means that some particular questions to which the researcher may seek answers may not be answerable due to the lack of or inaccessibility of the particular data sought. For example, the writer wished to find during his research some relatively recent data on percentages of school districts nation-wide which included reading instruction as part of their content area programs, but he was limited to results from an earlier survey. Another instance of this would be reading a report of a reading program and wanting to know the date of its inception and whether the program was initially made possible with federal funds, only to find that the author of the report neglected to include such information. Also related to inaccessibility of information is the problem of authors of reports and studies who are unable

to write with sufficient clarity as to avoid ambiguity and reduce the possibility of reader misinterpretation.

Another limitation of the present study, and one that is also related to its dependence on extant published materials, is its generally one-sided presentation of successful programs and methods. It should be obvious that programs and methods which are tried but are subsequently deemed to have been failures are not likely to be written about in journals or other published materials. It may be further assumed that many of those studies or programs which do make it into the literature have been "laundered" through the process of reporting about them so as to present both the programs and their sponsors in the best possible way. Therefore, the data compiled will by no means comprise a true history of all the approaches that have been tried in secondary reading instruction, but only those that were successful, or could be presented in such a way as to appear successful, to the extent that they could enter into the literature. The writer feels, however, that programs which failed could also provide useful information for future planners and that their absence from the literature precludes a comprehensive report on the many approaches to content area reading instruction that have been tried.

Another related limitation is the relative scarcity of contributions to the professional literature on reading programs written by secondary teachers. Descriptive reports of the programs and techniques that teachers are developing in the field are infrequent. This leads one to believe that much more may have been happening in the secondary schools than just that which has been reported in the literature. For these reasons, the present study cannot aspire to the status of a work

whose research is truly comprehensive.

Despite these limitations, research has yielded answers to the six questions that were posed for this study. These questions and their respective answers will guide the organization of this report. Chapter 2 will summarize, in general terms, the history of reading instruction in American secondary schools up to the mid-1960's and consider briefly some of the factors both within and without secondary schools that inhibit the development of effective programs that involve reading instruction in the content areas. With the history, importance, and difficulties of reading instruction as background, Chapter 3 will categorize and summarize some of the types of programs involving content reading that have been operative since the mid-1960's. Chapter 4 will establish a set of criteria by which to guage the success of these programs and will evaluate the programs by type as well as evaluate at least one selected individual program within each type. The evaluation will be followed by the results of an analysis of the programs for areas of similarity to determine whether there are any trends toward which these programs are contributing. Chapter 5 will conclude this report by summarizing the results of the study to that point, stating conclusions about the degree of desirability of any identified trends, suggesting the direction of future developments, and making some recommendations which have derived from the present study.

With these goals in mind, one should first look backward to the beginnings of secondary reading instruction in America and thereby place the current study in its historical context.

Chapter 2

BACKGROUND

Although the history of reading instruction goes back as far as written language itself, the history of reading instruction in American secondary schools is relatively short and receives only scant attention in two notable histories of reading instruction, Nila Banton Smith's American Reading Instruction (1965) and Mitford M. Mathews' Teaching to Read, Historically Considered (1966). The instruction of reading at the secondary level in American schools is unquestionably a "Johnny come lately" in education which marched into American schools as an indirect result of many secondary school graduates' marching off to World War I. The armed forces discovered that large numbers of servicemen were not able to perform their duties adequately because they lacked the ability to read. The American public's awareness of the illiteracy of so many servicemen led directly to the development of remedial reading programs in secondary schools after World War I (Cowan, 1977).

While personnel in many of the nation's secondary schools were initiating remedial reading programs, educational researchers were busy in what Smith (1965, p. 256) named "the first period of intensive research and application," encompassing the years from 1925 to 1935. Smith noted that high school reading and reading in different curriculum areas were two topics in particular in which interest increased substantially during this period of increased research activity.

Research, education, and life in general were greatly disrupted,

however, in the next national and international crisis. Despite having labeled World War I as "the war to end all wars," the world went to war again in the 1940's, and, once again, it was discovered that thousands of American servicemen were functionally illiterate. It was also discovered, however, that reading could be taught to these deficient draftees in a remarkably short span of time, approximately eight weeks, such that they were soon able to read the simple printed directions necessary to function effectively within camp life (Cowan, 1977; Smith, 1965, p. 269). Contemporaneous studies revealed that large numbers of high school and college students were deficient in reading. These factors spurred another increase in secondary remedial reading programs after the war as the nation's schools returned to a state of normalcy.

During the postwar years, a new term, developmental reading, appeared with increasing frequency in professional publications. Smith (1965, p. 273) credited the first use of the term to Guy and Eva Bond in their 1941 work, Developmental Reading in High School, in which they proposed a program of reading instruction to refine and develop the reading abilities of all high school students in addition to and separate from a program of remedial instruction to meet the individual needs of those whose progress in reading has been markedly inadequate. Smith (1965, pp. 296-297) also credited the Bonds' book as being the first professional book devoted to reading at the secondary level and cited Ruth Strang, Constance McCullough, and Arthur Traxler's 1946 work, Problems in the Improvement of Reading, as being the second. One could, however, make a good case for James M. McCallister's Remedial and Corrective Instruction in Reading (1936) as the first professional book devoted to reading at the secondary level. The work is, after all, sub-

titled A Program for the Upper Grades and High School, and the preface clarifies that the grade levels to be considered are grades 7-12, the levels now generally considered as the referent of the term secondary. Nevertheless, these three early professional books were soon joined by another influential work concerned with secondary reading, Reading in the High School and College, the Forty-Seventh Yearbook, Part II, of the National Society for the Study of Education. Smith (1965, pp. 296-297) stated that prior to 1948, the year in which this yearbook was published, the only reading instruction that had been done at the higher levels was remedial. Smith noted that the authors of the NSSE's yearbook, as well as authors Bond, Bond, Strang, McCullough, and Traxler, gave considerable attention to the teaching of reading in the content areas of literature, social studies, science, and mathematics. The writer thinks that similar credit should also be given to McCallister for Remedial and Corrective Instruction in Reading in which he used the term corrective in direct relation to reading in the content areas:

> The correction of reading difficulties in studying content subjects implies a close correlation of training in reading with training in other subjects. . . . This book presents a technique which provides for training in reading as a phase of the work of teachers of content subjects, but which does not interfere with the teaching of those subjects by requiring separate exercises. It points out the possibility of so associating the two types of training that instruction in reading becomes a part of and contributes to the training in content courses. (McCallister, 1936, p. viii)

McCallister devoted fully one third of his book to the instruction of reading in the content subjects of English, history, mathematics, and science, and thus, he must have been among the very first, if not the first, to call for the integration of reading instruction within the subject areas. This would seem to be corroborated by Summers (1963),

whose categorization of research from 1900 to 1960 related to reading at the secondary level lists under the category "Reading in the Content Fields" three journal articles by McCallister, all of which are from the early 1930's and predate all the other entries in the category.

Smith (1965, p. 300) noted that during the immediate postwar years, a number of published studies were concerned with the relationships between reading and the other language arts and that the number of studies at the secondary level increased. She further noted that the doctoral dissertations completed at this time showed a significant interest in reading in the content areas and language arts relationships.

Despite repeated calls for developmental reading, reading instruction in the content areas, and the recognition of reading as integral to the language arts, remedial reading instruction continued to be the main form of secondary instruction throughout the 1950's. Of this now distant decade, Cowan (1977) wrote:

> The apparent fear of the spread of communism seemed to stimulate remedial instruction at all levels in the United States, twice during the fifties. In 1950, after the Communists had attacked the Republic of Korea, President Truman declared a national emergency, to strengthen the United States. The concern for national preservation caused changes to be made in materials that children had to read in school, particularly in social studies and science. Teaching reading in the content fields became tremendously important. The second challenge came with Sputnik in 1957 and with the development of Soviet nuclear armaments. The technological supremecy of the United States was now challenged by the achievement of the Soviet Union, which vowed to establish world communism. Government grants were poured into the educational system to improve reading at all levels. (P. 79)

Smith (1965, p. 365) noted that developmental programs "underwent rapid expansion" in the early 1960's. Cowan (1977) noted that the sixties and early seventies saw a dramatic acceleration in the continued growth of remedial and corrective programs at the secondary level and credited

this directly to the millions of dollars in federal grants provided by the National Defense Education Act (NDEA) of 1958 and the Elementary and Secondary Education Act (ESEA) of 1965.

Artley (1968), in his review of over 180 studies and reports from the mid 1950's to the mid 1960's, noted this same trend:

> The literature seems to indicate clearly that the handicapped reader has received a major share of attention over the last decade, as is indicated by the number of remedial and corrective reading programs in relation to developmental programs as well as by the number of studies and reports of the use of corrective and remedial techniques and materials. (p. 111)

Artley also noted that a number of research and action studies described various kinds of developmental programs that included students besides those with special needs or reading handicaps. Some of these programs provided systematic reading instruction within regularly organized reading classes in grades seven or eight. In other programs, reading was a point of emphasis within literature classes. In yet other situations, separate units on reading, vocabulary, and rate of comprehension were only parts of English or language arts courses. Artley's review of the decade's research, action studies, and reports of various programs in reading for secondary students including remedial, corrective, clinic, and developmental programs led him to the following belief:

> The approach with recognized promise is one providing for the close integration of reading and study with the teaching of the various content areas. Since the teaching of content assumes that the learner will need to purposely select, comprehend, organize, evaluate, and apply ideas, generalizations, and principles--all of these being reading competencies--the close alliance of subject matter and reading is a natural and an obvious one. (p. 108)

Despite the potential success of teaching reading in the content areas, Artley was forced to conclude that "Reports of broadly conceived, sequentially developed, school-wide (in terms of both staff and students)

programs of practical worth, carried out by well trained teachers, are noticeably absent" (pp. 108-109). Margaret Early (1969) viewed the situation in much the same way:

> The past decade has witnessed increased action on the secondary reading front but not much change in direction. The ultimate goal remains the infusion of reading skills instruction into all school subjects where reading is an important mode of learning. That this is still a distant goal is reflected in the large number of programs in which reading is a scheduled course, an "extra" in the curriculum. That it is still a desirable goal is seen in the many programs which focus on inservice education for teachers in all subject areas. (p. 535)

Thus, one may view the history of secondary reading instruction in America as a progression from (a) little reading instruction before World War I, to (b) some remedial instruction after that war with further increases in such instruction following the next war, to (c) the addition of developmental reading classes during the 1950's and early 1960's for all students, but only at certain grade levels, and to (d) the hope in the mid 1960's of reading instruction in the content areas.

Before an examination is made of what has been happening in American secondary schools since the ESEA of 1965, however, one should note both those factors that necessitate reading instruction and those that inhibit the development of effective secondary reading programs.

The need for reading instruction may be shown through test results. A comparison of the results, obtained by the National Assessment of Educational Progress, of the 1970-71 and 1974-75 national assessments in reading of 9-, 13-, and 17-year-olds, shows that the mean percentages (the average percentage of students who answered items correctly) increased 1.2 percentage points for 9-year-olds, increased 0.1 for 13-year-olds, and decreased 0.1 for 17-year-olds (Tierney & Lapp, 1979). A comparison of national mean percentages of correct responses for the

third assessment in reading, 1980, to that of 1971 showed a decline of 0.7 for 17-year-olds, an increase of 0.8 for 13-year-olds, and an increase of 3.2 for 9-year-olds (National Assessment of Educational Progress, 1981). An analysis of the results by including an achievement class variable showed that students in the lowest achievement class made the most gains between 1971 and 1980: The mean percentage of low-achieving 9-year-olds increased 8.8 percentage points; that of 13-year-olds, 3.6 points; and that of 17-year-olds, only 1.2 points. In contrast, students in the highest achievement class showed little gain or declined: The mean percentage of high-achieving 9-year-olds increased only 0.8 while that of high-achieving 13-year-olds declined 2.4 points and that of 17-year-olds declined 2.3 points. Dr. Edward Fry commented on the trend of the most significant gains occurring in the lower achievement classes at ages 9, 13, and 17, while declines in the higher achievement classes are occurring at age 17:

> The disturbing part of these assessment results is that high school students, and particularly the best students, are not only failing to keep up with their counterparts of 10 years ago, they seem to be reading worse. . . . If reading is taught in the high schools as a separate subject, it is usually taught to only remedial or low-achievement students. These data tend to show that the only high school group that is slightly ahead of 1970 performance levels are the low achievement groups. Again we see reaffirmed that students seem to learn what they are taught. (National Assessment of Educational Progress, 1981, p. 48)

It follows, therefore, that reading instruction is needed at the secondary level, and that a particular need is for developmental reading instruction for average and above-average students.

Test results alone, however, do not establish the importance of reading. Studies of the relationship of reading to delinquency, academic success, and basic functioning in the adult world establish that the ability to read is important.

Miller and Windhauser (1971) stated that "a number of studies found a positive correlation between the incidence of reading disability and delinquency in secondary school students" (p. 185). To trace more specifically the cause/effect relationship involved, they drew the following conclusion:

> There is a relationship between school failure and delinquency. Probably school failure is more highly correlated with delinquency than is any other condition such as poverty or a broken home. In secondary school, failure for most students stems from their inability to read the content area materials successfully. (p. 185)

Concerning the relationship of reading to school drop-outs, Karlin (1969; 1972, pp. 6-7) reported that one study found that nearly 50 percent of the students whose reading scores placed them in the bottom quartile dropped out of school before 12th grade whereas less than 15 percent of those in the top quartile left school before reaching graduation. The researcher had also found that a very large percentage of the poor readers (including both those who quit school and those who made it to graduation) did have the ability to read better. On this same subject, Artley (1968) stated the following:

> One can never be quite sure whether reading problems are the cause of school drop-outs or whether both reading problems and failure to complete school have common precipitating causes. The studies do show that low reading achievement is associated with school drop-outs and, likewise, students who drop out of school early frequently have reading difficulties. Although many reasons may exist for early school termination, students feel that difficulty with reading is one of the major causes. (p. 113)

Adams and Shuman (1972) also noted that poor reading ability may be a factor in leading students to drop out of high school, and they stated, "It is ironic that while most high school dropouts have IQ scores comparable to those of students who remain in school, the vast majority

have reading scores far below those who complete high school" (p. 21). It appears, therefore, that reading ability, not one's general level of intelligence, may be a significant factor in determining future educational success or failure. In a study of the same general topic, but considering the other end of the academic spectrum, Wilson and Einbecker (1974) studied 898 junior college freshmen in relation to their past reading scores to determine whether reading ability may be considered a predictor of college performance. Their carefully executed descriptive study indicated a positive and significant correlation between reading ability and academic performance of junior college freshmen which they considered as evidence that reading ability is related to college success.

While success within the relatively artificial world of educational institutions may depend heavily on an ability to deal effectively with language in printed form, the printed word is also very much in evidence in the real world. Educational institutions are not the only bureaucracies whose functioning depends in large part on the filling out, flow, and filing of a flood of forms. Paper shuffling has become a way of life for millions of our citizens, and woe to that person who cannot go with the flow. The completion of forms and other paperwork, however, is only one aspect of functional literacy. The need to cope with printed matter extends from reading the labels on products, to following directions on street signs, to dealing with the daily delivery of junk mail droppings, to obtaining news and information. Margaret Early (1973), in relating such needs to education, stated:

> We want to raise them [illiterate adolescents] to levels of functional literacy that will help them to cope with the paperwork of our bureaucracy--the Medicare forms, for example--to read the signs around them, the newspapers perhaps, and to turn to contemporary paperbacks for pleasure. (p. 367)

Thus, the successful teaching and learning of reading skills better enables people to adjust socially, succeed academically, and perform functionally within our society.

Despite the widely acknowledged need for successful reading instruction at the secondary level, the achievement of this goal is no easy task. A number of interrelated factors both within and without the secondary school seem to conspire against effective reading instruction. The major inhibiting factor within the schools is the essential difference between the organizational structure of the secondary schools and that of their feeder elementary schools. Because secondary schools are departmentalized, no longer is the student taught primarily by one teacher who presents a variety of subject matters; rather, the student must adapt to a series of six or more teachers per day, each of whom presents only one subject area. And no longer is the student merely one of a teacher's 25 or more students, whom the teacher may get to know individually in a relatively short period of time; rather, the student is now merely one of 125 or more students in a teacher's grade book whom the teacher probably encounters less than one hour per day and whom the teacher is unlikely to know individually (Wiseman & Hartwell, 1980). In a system whose very design is based on the separation of content subjects, it is small wonder that many teachers' preoccupation is with content rather than with individual students. The depersonalization that often accompanies the transfer from a small neighborhood elementary school to a monolithic secondary school into which several such elementary schools feed may leave fledgling adolescents somewhat less than secure not only in their new roles as merely numbers scheduled by a computer but also in the expectation that they, not unlike Pavlov's

dogs, will salivate for various subjects at various times according to the ringing of regularly scheduled bells. In such a setting, the student's individual needs may very well clash with the content teacher's obsessive desire to "get through the material." Moreover, it is very probable that the course material is contained in one textbook used by all the students at one grade level, and it is even likely that the text is written at a level higher that that at which a significant number of students can read effectively. Within such a situation, the student, equipped with only sixth-grade-level reading skills (assuming optimistically that the student was reading on grade level at the end of elementary school), is now expected to read to learn, having supposedly learned to read in elementary school. In far too many cases, however, the student is unable to handle the reading material in the secondary content subjects. Thus, departmentalization, through its attendant ills of teachers who are mono-textbook content-only specialists, students who are not treated as individuals, and textbooks whose readability is higher than the reading ability of many of the students using them may contribute to the academic frustration and ultimate failure of numbers of students.

Ironically, and perhaps perversely, this departmentalization also seems to defy many of the attempts to remedy the situation. For example, when the administration and faculty of a school become aware of the reading problem and decide to do something about it, almost invariably they decide to establish a class for deficient readers, and thus reading itself becomes departmentalized, separate from the traditional content areas, and complete with its own "content" (e.g., federally-funded reading machines and boxes of multi-colored cards) and its own content

devotee, the reading teacher or reading specialist. As soon as such a solution is proposed, however, the problems manifest themselves (Boyle, 1971). Will the budget allow hiring another teacher and purchasing necessary materials? Is there physical space available for the new class? How shall students needing the class be identified? Shall students be required to take the class or shall it be elective? How will the students fit the new class into their schedules? Shall they take reading instead of English, instead of a foreign language, or in place of something else? Shall they take it all year, part of the year, or until they have reached a designated level of proficiency? Can a qualified teacher be hired to teach the new class, or shall it be assigned to someone already on the staff ("anyone can do it")?

Although temporarily satisfying answers to these annoying questions may be found and the faculty and administration feel secure in the knowledge that the reading problem is about to be solved, their security in the departmentalization of reading may be largely illusory, however, for there are critics within the ranks of professional educators who see flaws in special reading courses. Evans (1972) stated that although "some form of special reading course, usually corrective or remedial in nature, is the most expedient and, consequently, one of the most common approaches to the problem of disabled readers in the secondary schools" (p. 111), an evaluation of studies, experiments, and research on remedial/corrective courses reveals that only questionable support for claims of gain can be provided. Consequently, he doubted the overall effectiveness of such classes in significantly improving reading ability and concluded that the benefits, at best, are short term, especially when there is no supporting follow-up instruction. Frederick (1972) found that

there is an absence of logical, realistic, designated content for secondary reading courses. And in defiance of those who would consider the separate reading course a means of recognizing individual student needs, he stated that "when reading is treated as an isolated entity, it becomes a meaningless, depersonalized exercise in vacuity" (p. 13). He also noted that studies show that there is little transfer from reading classes to content classes.

Back in the content classrooms, the content teachers are discovering for themselves that there is, indeed, a lack of transfer. Their immediate reaction may be to blame the students for being stupid or lazy (occasionally, an astute observation of causation which the humanist not working in the field may dismiss a little too hastily and prematurely) or to blame the reading teacher for being incompetent (certainly within the realm of possibility, as will be shown later). Only rarely will a content teacher look "selfward" and accept responsibility for teaching transfer of reading skills to the particular content area. It is on the basis of this failure to act responsibly that Early (1973) made her criticism:

> The new breed of teacher is [no] more willing to teach reading skills than were his predecessors. They are simply more aware that many kids can't read the textbooks they used to assign; the tactics they use in [sic] circumvention.
>
> The science teacher says: "They can't read the textbook anyway. So I do the experiment, or I set it up for them to do." The social studies teacher says: "They can't read the textbooks. Maybe they shouldn't anyway--the truth is so distorted. So I lecture. Or I set up a simulation." The math teacher says: "I have to read most of the problems to them." Or he says: "We don't have a textbook; most of the kids are on their eleventh LAP. If they can't read the ditto, I explain it to them." (pp. 367-368)

Though viewing modular scheduling and electives in reading as positive signs, Early (1973) qualified her enthusiasm by writing that "there are

dangers, of course--all the dangers of the special reading classes which encourage content teachers to rely on someone else doing what is essentially their job" (p. 371).

Many content teachers, however, deny that the teaching of reading is their job. They say that teaching reading is the responsibility of elementary teachers or of special reading teachers in the case of seriously disabled secondary readers. Their responsibility is to teach content; besides, they have no training in reading instruction, and, consequently, they don't know how to teach reading. Certainly the latter is a valid point, but it should not deter a content teacher from taking some action on behalf of students having trouble with reading in that teacher's classes. The least that the content teacher can do is to evaluate the textbook(s) for readability. According to a study by Janz and Smith (1972), this is something that more content teachers need to do. Janz and Smith's study sought to determine whether a practical difference existed between the reading ability of students and the readability of their texts. (Practical difference was defined as existing only if the levels of texts were one or more years above the level of the students.) They studied 590 students in five schools in grades eight through ten and their English, science, and social studies texts by giving standardized reading tests to the students and applying the Flesch Readability Formula to the texts. Their conclusion was that over half the books assigned to the studied population of students were unsuitable. Whether a more recent study of the same type would yield similar results is merely an academic question since it must be each teacher's responsibility to select materials appropriate to the level of the students or adapt other materials as appropriate regard-

less of what may be happening in others' classrooms.

Even when the readability of the content materials matches the reading level of the students, the content teacher need not feel absolved of responsibility for teaching the students how to read the particular content text, for at least one research study indicates that there is a difference in the nature of content area writing which affects the comprehension of the reader. Elizabeth Dodd (1973) questioned whether there would be a difference in response patterns of subjects due to content of material even though the passages selected from different content areas were at the same readability level. The target population was 69 eighth grade students in an intermediate school. From science, social studies, and literature textbooks which were not in use at that school, the researcher selected passages which she determined to be at grade eight level of readability using the Fry Readability Formula. These passages were made into three traditional cloze tests which were given in differing orders to the students in an hour and a half of testing. The examiner scored the tests, computed the means, and noted that scores were significantly higher on the literature component than on either the science or social studies components. From this apparently well-executed study, the researcher concluded that there is a difference in the nature of content area writing that is independent of readability and that this difference would have some effect upon the comprehension of the reader.

Although Dodd offered no explanation for the higher scores in literature of the three areas, the findings are quite logical when one considers that the primary "content" of reading instruction in the elementary grades is literary in nature. One might reasonably conclude from

Dodd's study that elementary teachers are successfully teaching students how to read literature and that the learning does transfer to reading literature at a later time. One might also suppose, therefore, that if students were repeatedly taught how to read science and social studies materials, such learning might also transfer to reading such content at a later time, though continued refinement of such skills would be desirable to prevent regression in rate of achievement as the material became more complex through higher levels. Karlin (1975) also noted that most reading instruction involves story-type narrative materials and that even in upper grades, the emphasis in reading instruction remains upon learning to read rather than reading to learn, despite the change in reading requirements at higher levels. Karlin also stated that because the purpose for reading informational materials is different from that for narrative materials, one must read them differently. Along these same lines, Artley (1968) emphasized that "effective reading and study in each subject area requires the use of certain abilities related in varying degrees to that particular area" (pp. 110-111). Thus, departmentalization may not only precipitate reading problems and inhibit effective solutions to these problems but also provide the basis of versatile practical reading instruction through each department's development of those reading and study skills essential for fully functioning within that department or content area.

Despite evidence that each content area is unique and may require specialized instruction in reading skills for students to comprehend effectively the content reading material, many subject matter teachers have been reluctant to accept the teaching of reading as one of their responsibilities, which leads one to the major factor from without the

secondary school that inhibits the effective teaching of reading in the content areas--the teacher's own education, or lack thereof. Smith and Otto (1969) and Smith (1969) stated that the major obstacle to the integration of reading instruction into content area curriculums is the content area teachers' lack of knowledge about reading pedagogy, a deficiency that can be blamed on the pre-service education of secondary school teachers. Artley (1968) shared this view, but also thought that a basic misunderstanding is involved:

> Pre-service training courses have apparently failed to include content dealing with the competencies in need of development for effective reading in science, mathematics, or history. Teachers have also assumed that the teaching of reading involves the addition of something extra to an already overloaded course outline rather than being an inherent part of the teaching process--a <u>way</u> to teach rather than <u>something</u> to teach. (p. 110)

Whether content area teachers' reluctance to teach reading is the result of ignorance, misunderstanding, or a combination of both, one may assume that adequate pre-service training should have dispelled both reasons. Studies do show, however, that the majority of secondary teachers have not received any pre-service training in the teaching of reading. In a survey of 972 colleges and universities, Roeder and Roeder (1974) found that in 79.1 percent of the secondary curricula, prospective teachers were <u>not</u> required to enroll in reading methods courses, and that in 7.6 percent of the secondary curricula, from the traditional content areas, only those planning to teach English were required to take two to three semester hours of reading methods. Estes and Piercey (1973) noted that a national survey of English teachers in the late 1960's revealed that barely one-third had ever taken a course in teaching reading.

The course requirements of teacher training institutions are, however, largely influenced by the certification requirements of their respective states. Estes and Piercey (1973) surveyed the certification agencies of the 50 states and found that only four states required training in reading education for certification of all secondary teachers and that an additional four states required such training for some teachers, usually those in English. Bader (1975), in a similar survey, found that 17 states required secondary reading preparation for certification. Thomas and Simpson (1979) replicated these earlier surveys and found that 27 states required training in reading education of at least some secondary content teachers. Whether this apparent trend toward requiring pre-service training in reading pedagogy has resulted in increased attention to reading in content classrooms may become evident through the discussion of reading programs in the next chapter.

Another factor related to teachers' past education, and one which could affect the quality of reading instruction, is the teacher's own degree of reading ability. Gentile and McMillan (1977) administered the Cooperative English Reading Test to 348 elementary, intermediate, and secondary teachers. Using as the norm the scores of college freshmen who had also taken the test, Gentile and McMillan found that 28 percent of the teachers achieved at or below the 50th percentile in vocabulary, 49 percent, at or below the 50th percentile in comprehension, and 56 percent, at or below the 50th percentile in speed (i.e., they read slower and with less understanding). The researchers felt that the teachers with poor reading skills could have a deleterious influence on students if only because the teacher would be a poor model. It would appear, therefore, that both a teacher's knowledge and skills

may determine the extent to which that teacher can or should incorporate reading instruction into content classes.

To summarize briefly, the history of secondary reading instruction in American schools from World War I to the ESEA of 1965 consisted mostly of the establishment and expansion of remedial and corrective programs, the establishment of developmental programs, and some indication of the promise of content area reading instruction. Low achievement scores in reading, the relationship of poor reading to delinquency and academic failure, as well as the desirability of functional literacy are reasons for further improvement in secondary reading instruction. Departmentalization is an internal factor and teacher education is an external factor both of which have inhibited the growth of reading instruction in the content areas. It remains next to examine the extent to which programs of reading instruction in the content areas did grow and develop in the decade and a half from 1966 to 1981.

Chapter 3

PROGRAMS OF READING INSTRUCTION WITHIN CONTENT AREAS

During the 15-year period from 1966 to 1981, teachers, administrators, and personnel in higher education continued to experiment with various approaches to the problem of improving the reading abilities of secondary school students. While one might logically summarize some of these numerous approaches in chronological order, the imprecision of the authors of reports of reading programs as to the dates of the programs necessitates an alternative approach. Moreover, while a chronological order might facilitate organization, the result would likely be a relatively meaningless series of otherwise unrelated program precis. The general method of organization employed below will be to categorize programs according to type and summarize them in an order ranging generally from those programs which are only peripherally related to content area reading instruction and traditional types of programs to those which are innovative and show promise of effecting change in secondary teachers' ability and willingness to teach reading within the content areas. Many of the described programs, however, are complex and may include components common to other programs. The writer has attempted to categorize each program according to what he judges to be its most salient feature in relation to content area reading instruction. The reader should therefore bear in mind that a program summarized in one category might, with equal justification, be discussed at some other point as well.

One approach to the problem of secondary students who cannot effectively read and comprehend content materials is the parallel alternate curriculum. Wiseman and Hartwell (1980) suggested a program for secondary schools like that developed in St. Paul in the early 1970's in which content is presented to identified non-achieving disabled readers by means other than reading because "reading is important for functioning in a complex society, but not for being educated in the secondary schools" (p. 617). They recommended the separation of reading from content by teaching reading in all grades and devising programs that present content subject matter without requiring reading. They recommended a program of remediation of basic skills in which reading at the sixth grade level (i.e., functional literacy) would be the minimum goal. An approach similar to the St. Paul solution was tried at Lincoln (Illinois) Community High School in the early 1970's (Landis, Jones, & Smith, 1973). The problem was that the reading materials in the reading lab were totally unlike the reading required to pass content subjects. The solution was to develop a program which presented the content of freshmen courses English I, Mathematics I, and Science I through a variety of audio, visual, and kinesthetic instructional modalities, so that reading the content text would no longer be the principal means of gaining content information. Parallel to the special English, math, and science classes was a program of reading improvement. Landis, project director, and the others reported as results that students in the parallel curriculum seemed to find reading enjoyable as judged by the number of books read, new magazines requested, and parental comments about their progeny's at-home reading habits. They also reported passing grades for those students in English I, Math I, and Science I and that student

self-concept had improved as judged by increased participation in school clubs and other activities.

Another approach that has been tried to help the poor reader is grouping according to reading ability. New London (Connecticut) High School developed an English General Reading Program involving non-graded grouping based on reading ability (Racette, 1968). Racette, the reading specialist, reported that students were divided into four groups with 15-18 students per section, in which they received instruction appropriate to their level. Racette evaluated the program by noting that students' reading abilities had increased according to scores on the Gates-MacGinitie Reading Survey, that the dropout rate had decreased, and that students' attitudes and self-concepts were greatly altered. Racette also noted one unexpected effect of the English program's success: The social studies department also incorporated grouping by having three classes grouped according to reading ability. Bosanko (1975) reported that at El Toro (California) High School, where he was the principal, 30 percent of the freshmen and sophomores one year were placed in special reading classes and that these reading students were also placed in special English and social studies classes to receive instruction suited to their level of reading ability. A final example, that of the Richard C. Lee High School in New Haven, Connecticut, is a combination of ability grouping and that which has all the appearances of the parallel alternate curriculum approach. Rossman (1977), the reading consultant, reported that each of 500 identified students took reading in place of regular English and was assigned to one of the school's four reading labs based on the student's reading ability (2.0-4.0, 4.0-5.5, 5.5-6.5, and 6.5-8.0); as students improved, they

moved to the next highest reading lab and ultimately to a regular English class. The 1975-1976 school year also included a special social studies section for students who were unable to handle the texts in regular social studies classes; this section utilized taped lessons, filmstrips, and permitting a student to progress at his own rate. An evaluation of the program showed an average reading level gain of one year based on tests.

Another approach to helping students with reading problems in content classes is individualization. This was an important component of the comprehensive reading program of Bloom Township High School in Chicago Heights, Illinois (Model Programs: Reading; Bloom Township, 1971). In addition to a reading clinic for students with severe reading disabilities and a reading lab and reading resource room for students at all levels, Bloom Township High School had a program of individually prescribed study (IPS) involving reading in specific content areas. A student with a reading problem in a specific content class was referred to IPS, after which the referring teacher and a special reading aide planned an appropriate program for the student including work on the vocabulary of the subject area and readings which paralleled the course content but were on a simpler reading level. Made possible with Title I funds, the IPS component began in 1968 for freshmen and sophomores and was expanded to include juniors and seniors in 1970-1971.

Another approach, one that has become common practice in secondary reading programs, is the separate reading class that is allied to some degree with the English department. For example, in San Dimas (California) High School, all incoming freshmen who were identified as reading below sixth grade level of comprehension were scheduled into a

reading lab class for English credit, and reading teachers worked with English teachers of ninth graders to help them teach reading skills to their students (Weber & Brown, 1976). Weber and Brown, principal and remedial reading teacher respectively at San Dimas High School, reported that posttests showed an average gain of eight months for all ninth graders and one year three months for those in the reading lab. Arnold (1976) reported that in the senior high school of Pawhuska (Oklahoma) Schools, approximately 25 freshmen per year were enrolled in two sections of remedial reading for which they received English credit and that two additional sections provided a continuation of the program through senior high, though most students reentered regular English before their senior year. Loeffler (1976) reported that in 1969 Norman (Oklahoma) High School started a reading lab for remedial readers which provided reading experiences for English credit with Developmental Reading as an English elective. She reported that most students made a gain of about two years' reading growth according to standardized test scores. Kummer (1976), teacher of reading and English at Batavia (Illinois) High School, reported that an 18-week developmental reading class was open to all upperclassmen as one of the English electives at his school. Hodges (1974), reading teacher for grades 10-12 at Douglas County High School, Castle Rock, Colorado, reported the existence of nine different reading classes as part of the English elective program. At the beginning of the program in the spring of 1970, 47 percent of the student body read below grade level on the Nelson Denny Reading Test, but at the end of three years, only 29 percent read below grade level. Hodges wrote, "Perhaps the most important benefit of such a program is that the attitude toward reading has changed significantly during the time it has

been in operation. Reading classes are considered important and interesting ones in the elective program" (p. 32).

Another approach is to have students alternate back and forth between a reading lab and a content class. Groomes (1966), chairman of the English department at Guilderland Junior High School, Guilderland Center, New York, reported that each English teacher's class was scheduled into the reading room for five consecutive days once every six weeks, after which the students returned to their regular classroom, where they perfected the skills introduced by the reading teacher. In DeAnza Junior High School's Demonstration Program in Reading (California's Ontario-Montclair Unified School District), eighth graders spent three weeks taking English in a regular classroom and then spent three weeks in the reading center after which they returned to their English classroom, and so on (Wayne, 1980). In the Centinela Valley Union High School District (Hawthorne, California), in which each high school had two reading labs, every ninth grader (except those in special reading classes) was required to spend eight weeks in the reading lab (Berkey, 1967). Berkey, the district reading coordinator, reported that each section of English I received a period of orientation and motivation after which it was divided in half with the English teacher taking 15 students to one lab and the special reading lab teacher taking 15 into the other lab. After eight weeks of a concentrated program, students returned to regular English class where follow-up instruction occurred with at least one day per week spent in supervised reading. Berkey reported that during one year, the average gain on the Nelson Silent Reading Test was 10 months for the eight weeks of lab and eight months between the end of lab and the end of the school year, for a total gain of 1.8 for the whole year.

A more flexible approach was taken at Carl Hayden High School in Phoenix, Arizona, where entering freshmen during the first week of school in 1966 were tested and divided into four groups (accelerated, developmental, corrective, and clinical) to receive reading and study instruction for the full year (McDonald & Nache, 1969). The reading lab, however, was organized to serve the content areas, and teachers could bring their classes to the reading lab, or the reading teacher would go to the subject classrooms for units of combined subject matter and appropriate reading instruction. McDonald and Nache reported that mean gains in reading tests were statistically significant for the first semester of 1966-67 and both semesters of the 1967-68 school year.

An additional type of program is that which involves two or more content teachers in the planning and teaching of a separate class involving reading instruction. For example, within the reading program of August Martin High School in New York City, a foreign language teacher and a social studies teacher were assigned to groups whose reading materials were chosen from among foreign language cultural materials and social studies skills (e.g., map reading) (Shapiro & Kriftcher, 1976). Another case in point is Memorial Junior High School in Valley Stream, New York, where a new course, Communication Arts, was established for average seventh graders by the chairmen of the English, social studies, math, and science departments, who planned for it during a one-week summer workshop (Hosker, 1974). Hosker, the science chairman, evaluated the program by stating, "It is too soon to draw conclusions about our experiment, but results in regular classes to date indicate that it has merit. . . . and reading difficulties in the various subject oriented classes are being alleviated" (p. 43). In

Keokuk, Iowa, a team of six teachers (one math, one science, one social studies, and three language arts teachers) worked with seventh graders who fell below the 50th percentile (local norms) in reading (Model Programs: Reading; School-Within-A-School, 1971). The team focused on reading in all subject areas. Begun in 1968 with funding from Title III of the ESEA, the program was identified by the United States Office of Education as one of the nation's ten most promising reading programs. In evaluating the program, it was noted that a comparison of pretest and posttest scores for word meaning and paragraph meaning of the Stanford Acheivement Test showed marked improvement. In 1970 at J. Cooke Junior High School in Philadelphia, Pennsylvania, the English, science, and developmental reading teachers implemented the Science-Language Arts Core Program, a science curriculum suitable for use with students reading at the lowest grade levels (Zorn, 1973). Each week, the students had six periods of science, four periods of English, and two periods of developmental reading. The Language experience approach was the main method of instruction, whereby student accounts of experiments, observations, demonstrations, and so forth, became the substitute for a content textbook. According to standardized test scores, students increased at least one year in grade level. Another program involving reading instruction in a particular content area other than English is New York City's Reading Improvement Through Art (RITA), initiated in 1975 (Corwin, 1977, 1978). In each of eight high schools, a class of 25 sophomores reading at least two years below grade level was placed in a RITA class to receive one 40-minute period of art instruction daily. The art teacher attended curriculum-writing workshops, and at least twice a week a reading specialist visited classes. Much

of the instruction focused on the student-kept journals and reading to obtain information relevant to the student's immediate art project. For an evaluation of results, Corwin turned to an administrative source:

> Dr. Erick Mortenson, Office of Educational Evaluation, New York City Board of Education, writes that, in each semester, "The growth grades, based on reading scores of participating students were not only significantly beyond statistical expectations; they were beyond growth normally expected in a full year's program." (p. 52)

Yet another type of program for improving students' ability to read content materials is the program which seeks to apply a single instructional technique in all content classes. At Franklin Junior High School in Mankato, Minnesota, all students in grades seven and eight learned the SQ3R method in English class in a week-long mini-course (Gruber, 1973). Content area teachers were invited to a demonstration of the method and were encouraged to use it with their classes: many agreed to do so, and Gruber, the reading consultant, reported glowing success. A similar program was instituted in Sewanhaka Central High School District, Frankling Square, New York (Dramer, 1973). Operation READS (Reading Embracing All Disciplines at Sewanhaka) involved bombarding pupils with the SQ3R method in all classes for approximately five days. As part of the program, which began with only grade seven and within five years included grades eight and nine as well, content teachers were paid to write appropriate materials during a two-week summer project. Two reading specialists provided two days of reading instruction and stayed with the project providing expertise to help develop teaching units for the week designated for SQ3R emphasis. During the week of Operation READS, every pupil learned how to read each content area's materials from the respective teacher of that content

area. As evaluation, Dramer, the district curriculum supervisor, stated:

> All kinds of performance-referenced criteria were provided in a thirty-page evaluation packet. The general results indicated that our pupils . . . entered secondary school without . . . a system for studying. By the end of the program, they had been exposed, and exposed in depth, to the SQ3R method, and . . . . they knew how to use it and they were using it, and our evaluation demonstrated this. (p. 6)

Meanwhile, across the country in the Tolleson schools near Phoenix, Arizona, a different technique was being tried during the 1972-1973 school year (Blossom, 1973). An approach called "glossing" was explained to teachers at both a one-week workshop before school began and a four-hour workshop in each participating school when school began. Teachers were asked to identify difficult vocabulary words and idiomatic phrases in each lesson, list and define these in simple English on a handout for student use, and spend time at the beginning of class discussing the list. During the week's workshop, teachers learned techniques of writing glossaries and began developing such materials for their own texts. An analysis of test results by the State Board of Education showed an average gain of 2.64 grade levels for the freshman class, which had been the target population.

One other approach to the encouragement of teaching reading in the content areas is the use of a reading consultant. University High School (a University of Chicago laboratory school) began this approach in the early 1960's in hopes of involving all teachers in a school-wide effort to improve students' reading skills (Thomas, 1967). After first showing that a need existed, Thomas, the reading consultant, helped teachers by meeting with them in groups, conferring with individual teachers, making classroom visits, and creating a resource center for teachers. By the second half of the decade, the consultant and an

assistant in training were unable to keep up with requests for help. Thomas estimated that three-fourths of the teachers of subjects involving reading were contributing to reading improvement; Thomas also reported that test scores of students had moved upward. Another example of the use of secondary consultants to effect change is the Kansas City, Missouri, School District (Minturn, 1971). During the 1969-1970 school year, two to four reading consultants were assigned to each secondary school in the district. Each consultant worked with four regular classroom teachers in English or social studies, at first assisting and instructing the classroom teachers, later developing inservice workshops to meet apparent needs. An example of results was that the average gain for eighth graders between the end of seventh grade and the end of eighth grade was .53 years.

A final approach to the problem of the lack of reading instruction in content area subjects is the inservice training program for teachers. For example, at Rufus King High School in Milwaukee, Wisconsin, despite a well-established reading center, reading deficiencies continued, but in February through May of 1971, a renewed attack was begun through weekly inservice sessions and miscellaneous seminars at which content teachers learned techniques to strengthen reading skills through content reading and were made aware of the wide range of methods and materials available (Wiggins, 1972). Wiggins, director of the reading center, reported that it became accepted at Rufus King High School that reading skills can be taught through the regular assignments of basic subject matter and that the reading teachers are responsible for showing the content teachers how. In the Newark (Delaware) Public Schools, Project CARE (Content Area Reading Enrichment) sought to have children receive

reading instruction in all content areas through grade eight (Cassidy, 1973, 1977). Reading specialists would go into the classrooms of content area teachers and show them how to teach reading through content by using the teachers' own students, materials, and classrooms on the practical assumption that the most effective inservice would involve demonstrations within the teacher's "natural habitat." Inservice sessions resulted in materials (Project CARE Kits) designed to reinforce reading skills in a particular content area. In the Hillsborough County (Florida) Public Schools, the supervisor of secondary reading designed an inservice program in which workshops were scheduled in each secondary school with teachers coming for basic instruction during conference periods and later being monitored as they applied learnings to their own classes (Bullerman & Franco, 1975). Also, a college credit course was offered on Saturdays using the teachers' own texts and materials. In Memphis, Tennessee, a complete reading center was established for the teachers (Henry, 1977). Created in 1971, the center had a staff consisting of a college professor and four teachers. Teachers came to the center in groups of 20-30 for a week of released-time inservice, after which they would get follow-up visits from center staff teachers. By the summer of 1976, the center's staff had grown to include a director, an assistant director, and 21 staff members; also, all of the elementary and about half of the secondary teachers had participated in the program, a fair accomplishment considering that there were about 6,000 teachers in Memphis. In evaluating this program, Henry, director of the reading center, stated that "On the California Reading Test, children in an experimental group score significantly higher than control group children" (p. 512) and "Teachers have repeatedly reported improved student perfor-

mance" (p. 512). Numerous other general inservice programs are described in the professional literature (Bosanko, 1975; Criscuolo & Rossman, 1977; Osburn, 1974; Schleich, 1971; Smith, 1969).

Sometimes an inservice training program is designed for teachers in one particular content area. For example, Stanchfield and Wiseman (1974) recounted an inservice program for the English teachers of 12 selected classes of about 500 ninth graders in six junior high schools of the Los Angeles Unified School District. As this was designed as an experimental study, its purpose was less the improvement of students' reading abilities than to determine whether an inservice program can effect such improvement. Phase One involved school selection, identification of experimental and control groups and teachers followed by an orientation meeting and six two-hour inservice sessions. Phase Two involved determining an implementation date, establishing an on going staff development program and setting up a monitoring schedule. Phase Three was the evaluation of this pre-post-experimental-control research study: Comparing scores from June and November on the Comprehensive Test of Basic Skills, Stanchfield and Wiseman noted that both the experimental and control groups made significant gains during the experimental period, but the difference between posttest means for the two groups was not significant. The researchers, however, identified factors that contributed to the lack of significance of their findings: (a) There had not been enough time for inservice development in the teaching of reading skills with transfer and application to other areas and materials, and (b) a generalized approach had been used without a specific time guideline for sequence, consistency, and continuity. An example of an inservice program for math teachers was given by Henricks

and Sisson (1980). This program was presented at West Junior High School in Columbia, Missouri, in two phases during two school years and provided comprehensive training in a wide variety of reading skills appropriate to reading math content. Diem, Schnitz, and Fairweather (1981) recounted and attempted to evaluate a three-year inservice program designed primarily for social studies teachers but which also included language arts teachers in the third year. This program had the first year's trainees become the teachers during the second year. From interview/questionnaires and classroom observations, the evaluators noted the following: (a) Teachers liked the format and model of the project, (b) teachers did use methods to diagnose student and textbook deficiencies, (c) teachers used least those techniques which necessitated changes in teaching strategy, (d) teachers tended to overuse single techniques which they liked, and (e) teachers avoided strategies that involved higher level thinking. Restrictive district policies prevented normal testing procedures, but through a complex statistical analysis of available data, Diem et al. concluded that participation of the high school teachers in the project did have a beneficial effect on student performance.

A somewhat unusual approach to inservice training was recounted by Reidelberger (1972), teacher of reading and chairperson of the English Department at San Carlos (California) High School, where a staff problem-solving committee desired to make the faculty more reading conscious and involve members of the faculty directly with students who had severe reading problems. After getting total staff endorsement of a proposal to involve each staff member in teaching reading, two half-day sessions of inservice training were planned and held in September. The target population of students were those freshmen and sophomores who scored

at the seventh grade level or below on the Gates-MacGinitie Reading Test and those juniors recommended for the program by teachers. These students would be scheduled into the reading lab for nine weeks in place of English; one week would be used for pre- and posttesting, and eight weeks, for instruction. Instruction would be given by the entire faculty; each teacher would give up one of two preparation periods for ten consecutive days to be part of a two-teacher team to work with a class of ten remedial students in the lab. The week before taking over, the two teachers scheduled next would have an orientation session and observe the class in order to assure continuity. In evaluating the program, Reidelberger noted that test results showed that students did improve, particularly freshmen, whose average gain for the time in the lab was 1.6 years. She also noted that the two major goals of the unusual inservice program were met: Each teacher was made aware that students need help with reading, and each teacher realized that, although trained to teach content, he or she could provide help in teaching reading.

Another factor in inservice training is the direct involvement of colleges and universities in designing and implementing inservice programs in their respective geographical areas. Singer (1973) recounted a two-year program conducted by the University of California, Riverside, in cooperation with Riverside Unified School District and San Bernadino Unified School District. The goal was to prepare reading content specialists for the junior high level; participants would earn a Master's Degree in Education. During the first year of the program, the trainees studied at the university with field experiences in a nearby junior high school; the second year, the trainees became interns in four junior high schools in Riverside and San Bernadino. In May of the first year, a

one-day conference, taught by Dr. Harold Herber, was held for the principals and department chairmen of the participating junior high schools. During the afternoon sessions, the Content Reading Specialists served as consultants to each content group as they worked on constructing materials. The target population was the seventh and eighth grades, and the following year, the specialists became intern teachers but spent one third of each day consulting with other teachers. An evaluation was made by simply comparing test results from the content specialists' classes to those from a volunteer teacher's classes; the results were not statistically significant. Another example of a program involving both preservice and inservice components is the alliance of Queens College of the City University of New York and three local schools as reported by Downing (1973). Project CRISIS (Center for Reading Improvement/Students Instructing Students), a reading center, would be housed in the junior high school where two undergraduate courses would be taught and where teacher education students would spend additional lab time as well as in regular classrooms. The school staff could also use the lab and participate in courses. The Center was to join preservice teachers, inservice teachers, and teacher educators in an alliance from which would emerge an assessment of needs, statement of objectives, means to achieve them, and techniques of evaluation. Another example of a university's involvement in inservice training is the seven-year program Reading-Writing in the Content Fields at the University of Northern Colorado in Greeley (Pavlik, 1978). The basic program would involve a semester's worth of carefully planned seminars and workshops which would bring college and high school teachers together. Two seminars would culminate in a workshop where parti-

cipants construct and use informal assessment instruments, learn ways to clarify reading and writing assignments, and develop materials to reinforce the use of reading and writing in content areas. Pavlik, a member of the university's staff, expressed the hope that the program would become a seed program with each year's participants leading a program for colleagues in their own local geographical areas. The ultimate goal of the program is to improve the reading and writing instructional practices of both university and high school teachers in order to improve the reading and writing abilities of university and high school students and of future teachers.

Approaches to reading in the content areas thus include parallel alternate curriculums, ability grouping, individualization, the separate reading class as part of the English program, occasional use of the reading lab, team teaching of a reading class by content teachers, programs based on a single instructional technique, the reading consultant, and numerous varieties of inservice training to help content teachers teach reading.

A summary of selected programs for improving the teaching of reading in the content areas does not, however, present a complete picture of content reading instruction. It tells us only what has been happening in a relatively few selected places; it does not tell us how common or widespread a certain type of reading program may be. For such information, surveys provide some pertinent data.

Freed (1973), research associate of Research for Better Schools, reported the results of two surveys by that organization. A survey of 41 of the 50 state departments of education revealed that 90 percent of the state departments had no requirement for teaching secondary

reading at the junior high level and that 98 percent had no such requirement for the senior high level.

There is some evidence, however, that additional states are requiring instruction in developmental reading and that such instruction shall involve the content areas. For example, in January of 1978, the Pennsylvania State Board of Education made a regulation effective March 11, 1978, that required by July 1, 1979, "at least one planned course for all students, providing instruction in developmental and functional reading skills with extensive experience in informational and recreational reading" (Pennsylvania Department of Education, p. 1). Furthermore, developmental reading was defined as "reading skills instruction which includes: Extension into all content areas with the shared responsibility of all teachers" (p. 3). Similarly, the Regents of the University of the State of New York, State Education Department, have stated:

> The teaching of reading must not be exclusively confined to any time or place in the school, but must pervade the entire educational program. . . . reading instruction must not be isolated from other aspects of the learning and communication processes. In all his educational experiences, the student should gain reading and reading-related skills . . . .
>
> Reading instruction is . . . a major component of the elementary program. However, every secondary teacher also has a responsibility for providing direct instruction in comprehension skills pertinent to his subject area, geared to the ability and achievement levels of the students . . . . English teachers continue to have a major responsibility for providing direct instruction in a wide range of reading skills to . . . students for whom no special reading programs are offered. (Current Practices in Reading, 1977, pp. 13-14)

The two states of Pennsylvania and New York, at least, very definitely support the integration of reading instruction into content subjects.

A survey of selected school districts resulted in only a 50 percent response (Freed, 1973). Of those districts which responded, 28 percent required all students to take a reading course in junior high

school, but only five percent required this at the senior high level. School districts, fortunately, offer more than they require. Whereas only 28 percent required a course for junior high schools, 66 percent of the responding districts actually offered at least one such course. And while only five percent of the districts required such a course for senior high schools, 55 percent did offer at least one. What school districts endorse, however, is different from either their requirements or their actual offerings, for 94 percent of the responding school districts endorsed reading as a course separate from English, and less than five percent felt that reading should be integrated into the total school curriculum.

A survey of California schools (Graham, 1969) revealed that 82 percent of the reading programs in that state consisted of special reading classes which stressed remedial techniques and basic instruction on general reading abilities. This survey also showed that reading programs at the secondary level were a relatively recent development: 75 percent were less than five years old. Graham concluded that "the goal of reading instruction as a total school effort remains virtually untouched" (p. 565).

A survey of Florida schools revealed that 77 percent had a secondary reading program (Boyle, 1971). Of those with programs, 88 percent provided remedial instruction, 57 percent, developmental instruction, and only 25 percent provided remedial, developmental, and advanced reading instruction; 76 percent, however, provided some instruction at all grade levels. Only 40 percent indicated any reading instruction in content areas, and this may have included the many schools in which developmental reading is part of the English curriculum.

A survey of schools in western New York indicated that 77 percent had "regularly provided, faculty directed reading instructional programs of a minimal six weeks length" (Hill, 1975, p. 13) during the 1973-74 school year. Of these, 65 percent had originated since 1965. Of those schools with reading programs, only 41 percent reported that their school provided content-related reading instruction; although this represented a 25 percent increase from 1970, this increase ranked below that for remedial, corrective, and developmental instruction. Moreover, although 41 percent reported reading instruction in the content areas, only six percent considered content area instruction to be their major program emphasis. Even in those schools reporting some content-oriented reading instruction, such instruction was limited to certain areas: 86 percent reported such instruction in English, 10 percent reported such instruction in social studies, and only 4 percent reported it in other areas. Another survey of New York Schools conducted in December of 1975 showed that while developmental reading was made available in grades four through six by 95 percent of the school districts, only 49.2 percent offered such instruction in grades seven through nine, and merely 21.3 percent offered it in grades ten through twelve.

It would appear, therefore, that although much interest has been shown in teaching reading in the content areas and although many schools have developed programs in which such instruction takes place, these schools represent only a relatively small percentage of America's secondary schools.

Chapter 4

EVALUATION OF PROGRAMS AND ANALYSIS OF TRENDS

Although there are numerous types of programs in which the teaching of reading within content areas occurs and despite the infrequency of such programs within America's secondary schools, some analysis of the types of programs described is needed to determine not only their degree of success but also whether similarities among these diverse programs indicate the existence of any trends within the field.

Before one can determine the degree of success of a program of reading instruction, however, one must establish a set of criteria against which to measure the program's achievement. Because a reading program is merely an organizational structure within which teachers teach and students learn, it must be evaluated on the basis of the degree to which it facilitates such teaching and learning. Such facilitation may be determined, at least theoretically, on the basis of three interrelated factors: the types of reading instruction which the program provides, the number of students the program reaches, and the degree to which reading instruction is integrated within the school's overall curriculum (or the amount of time during which students are involved in reading skills development). The writer thinks that attempting to measure the success of a reading program solely on the basis of results of reading tests is, at best, a dubious practice since a program does not exist as a simple isolated entity but is comprised of complex interrelationships among instructional techniques, instructional materials,

learning environments, and other factors, any one of which may affect test results. Because test results may be affected by any one of the variables within a program, the overall reading program may be evaluated by comparing it to a theoretical model of what a comprehensive reading program should be like. For purposes of establishing criteria against which to measure the described programs, a desirable program shall be considered to include five types of reading instruction: remedial, adapted, corrective, developmental, and accelerated (Otto & Smith, 1970, pp. 27-33). Only through providing each of these five types of reading instruction can a program meaningfully reach all students and seek to meet their individual reading needs. Not only would a desirable program reach all students, but it should do so almost all the time that the student spends in school. That is, not only should reading instruction be provided vertically (i.e., at all grade levels), but it should also be provided horizontally (i.e., within every course in which reading is assigned) (Pavlik, 1979). In summary, this model reading program provides five types of instruction, reaches all students, and does so both vertically and horizontally.

While it is certainly possible to have a program that embodies all the characteristics of the model program but which is, nevertheless, unsuccessful, it is a certainty that any reading program which excludes (whether intentionally or unintentionally) any segment of the student population from the program will be unsuccessful in relation to those it excludes. At the same time, such a program may be quite successful in relation to the students it does actually reach. Therefore, a reading program must be evaluated not only for its degree of comprehensiveness but also for the extent to which it achieves its goals for the

particular body of students it intends to reach, regardless of how small a percentage of the total school population this may be. One valid way of measuring a program's success with its target population is the use of the time-honored reading achievement test. A common approach is to measure students' reading gains through a comparison of the results of a posttest to those of a pretest and to assume that any gains are due to the intervening instructional period. This approach to evaluation provides an objective view of a student's progress and allows statistical analyses to be made. Tests, however, are a relatively artificial component of the educational world and do not measure the full range of behaviors and attitudes that effective reading instruction seeks to promote. Therefore, an additional subjective means of evaluation is appropriate in measuring a program's impact on the students it seeks to serve. Frederick (1972) proposed that an evaluation of a reading program's success should include several evaluative questions, which, taken together, equal one general question: What can students do after being in a program that they could not do before? The several subquestions include the following: Do students read more than before? like to read? study more effectively? perceive themselves as better readers? get higher grades? apply their own experiences to what they read and apply what they read to their own lives? The answers to such questions are indicative of the extent to which students may be able to transfer and apply reading skills to the real world in which most of them will spend most of their lives. Thus, there are three means by which to measure a program's worth: comparison to a comprehensive model, objective analysis of test results, and subjective evaluation of what students have learned to do.

The establishment of a comprehensive model as one of the criteria against which to measure the previously described types of programs necessarily means that not one of the programs can be termed an unqualified success. Each one, however, may be considered a success to the degree that it serves well those whom it seeks to serve (as measured objectively by tests and subjectively by observation) and would therefore be desirable as one part of some still larger program.

The parallel alternate curriculum (Chapter 3, pp. 27-28), for example, may be considered useful as the adapted or remedial part of a larger program. The identification of disabled readers and slow learners and making available special classes for them in which reading is taught at their level of skill development is desirable. The total elimination of reading in their content classes, however, may be a questionable practice. Perhaps a significant reduction in reading assignments accompanied by instruction from the content teacher on how to read them would reinforce the skills being taught in the separate reading class and result in more meaningful learning than that resulting from the total elimination of reading requirements outside the reading class. The particular parallel curriculum reported by Landis et al. (1973) occurred only in grade nine. Despite the positive subjective evaluation of the program's success (based on number of books read, parental feedback, etc.), one wonders what happened to the students during the next three years of high school, as it is unlikely that their one-year parallel program of reading improvement was a life-time cure-all for their reading ills.

Grouping students according to reading ability (Chapter 3, pp. 28-29) has some value if the division of students facilitates adapted, developmental, and accelerated instruction. If, however, only one or two

of the student's classes (e.g., English and social studies) are so divided or grouped, the student's individual reading needs in other content subjects may remain ignored. Moreover, ability grouping only within that most isolated of conclaves, the reading lab, will probably have little effect on the student's reading outside the lab, unless the typically vacuous reading exercises are replaced with meaningful integration of reading instruction with the kinds of content materials that the students do encounter outside the lab. The specific example of ability grouping within a reading lab reported by Rossman (1977) resulted in an average reading level gain of one year for the participating students as determined by tests. Considering the low grade levels at which these students were performing, an increase of one year was a remarkable gain in rate of achievement, according to the objective evaluation.

The reading program of Bloom Township High School (Chapter 3, p. 29), which included individually prescribed study for students having reading problems in a content class, appears to be a nearly comprehensive program, except that students apparently do not receive reading instruction in all classes unless they are singled out for such instruction individually (Model Programs: Reading; Bloom Township, 1971). Although the IPS component is surely better than nothing, the content teachers could, perhaps, eliminate the need for it by utilizing techniques for facilitating reading comprehension within their classes. The expansion of the program, however, does suggest that needs were being met and resulted in the kind of feedback that leads to continuing to do that which works and doing it for a larger group of students.

That most enduring component of reading programs, the separate reading class (Chapter 3, pp. 29-31), has already been cited and criti-

cized for being departmentalized and, therefore, isolated from regular content classes. While the separate reading class may provide for various types of reading instruction, especially if several reading electives are made available with that in mind, and may occur at all grade levels, it does remain an isolated class and may not be truly helping students read the materials in the regular content subjects. Unfortunately, the separate reading class is usually made available at only one or two grade levels, in which case its impact is limited both vertically and horizontally. The particular program of reading electives reported by Hodges (1974), however, appears to be quite comprehensive, ranging from a class in basic reading skills to one which is especially designed for college-bound students. Presumably, these electives are available to all students in the high school, thereby providing instruction vertically. Despite the absence of a horizontal component, the program was reported as successful based on both objective and subjective evaluations (See Chapter 3, pp. 30-31).

Even programs in which students alternate between the reading lab and a content class (Chapter 3, pp. 31-32) appear to have students do so primarily in relation to English classes. If restricted to English, the program will likely fail, like the typical reading class, to generate transfer of reading skills to the other content areas. One specific program of this type that does show promise is that of Hayden High School in Phoenix in which the reading lab was planned to serve all subject areas (McDonald & Nache, 1969). The specific lab/English program described by Berkey (1967) appears to have been quite successful as measured by tests. Berkey reported that during one year, the average gain on the Nelson Silent Reading Test was 10 months for the eight weeks

of lab and eight months between the end of lab and the end of the school year, for a total gain of 1.8 for the whole year.

The type of program in which two or more teachers (at least one of whom is a content teacher) plan and teach a separate class (or classes) involving reading instruction through content materials (Chapter 3, pp. 32-34) appears to be a promising concept, for it attempts to integrate reading instruction with content subject matter. A separate reading class involving content-type materials and taught by a content teacher should promote more transfer of reading skills to regular content classes than the typical separate reading class with machines and boxed kits as its "content." In practice, however, the programs involving team planning and team teaching appear to be limited in scope. Of the five such programs summarized in the preceding chapter, three were for students at one particular grade level and three were only for students who were poor readers while only one was for average readers. Because these programs neither provided for varied types of reading instruction nor involved all students at all grade levels, they fall short of the comprehensive model. The Science-Language Arts Core Program as reported by Zorn (1973), however, appears to have been successful in terms of standardized test data (most students increased at least one year in grade level) and subjective teacher observation. Zorn appraised the program as a success for changing discouraged students into self-confident ones, for improving attitudes toward reading, for eliciting pride in accomplishments, and for increasing free reading. Zorn also received positive unsolicited reports from other content teachers which suggests that some transfer was probably taking place. Therefore, the program was a success for the students it sought to serve.

The type of program which seems to be quite comprehensive in one sense is one in which a single instructional technique (e.g., SQ3R) is utilized in all content classes (Chapter 3, pp. 34-35). The programs described involved all students horizontally (or almost all, for the uncooperative non-participating teacher, like the poor, will always be with us) and could involve all students vertically by not limiting the target population to only one or two grade levels. While the particular programs described earlier do not specify whether the programs included any of the five types of reading instruction, each type (except remedial) could be given by the regular classroom teacher as part of individualized instructional practices. The flaw in such a program lies with the lack of breadth in reading skills development, for a single instructional technique cannot be expected to accomplish everything. Also, a single uniform instructional strategy may not work equally well in the various content areas. One might hope, however, that the success engendered by the one technique might lead the teachers to try other techniques which could be presented to them by means of inservice training sessions. The one particular program of this type reported by Blossom (1973) yielded impressive results. After a year of "glossing" (introducing each day's lesson with discussion of lists of selected vocabulary words from the lesson), freshmen students had made an average gain of 2.64 grade levels according to an analysis of test results by the State Board of Education. A more subjective evaluation based on questionnaires completed by both teachers and students showed that both groups had a favorable attitude toward glossing. An analysis of the questionnaires also showed that this program had resulted in improved self-confidence and greater enjoyment of reading.

Another approach that appears to have promise for effecting change is the use of a reading consultant (Chapter 3, pp. 35-36), who, regardless of the specific title assigned to the position, encourages all teachers to incorporate reading instruction into their classes. While this approach may not be classified as a program in itself, it is likely that a reading consultant's role would include the development and support of some kind of reading program. Perhaps the ideal program developed by a consultant who was committed to the goal of reading instruction through content areas would be so unobtrusive that to an untrained observer it would be seemingly non-existent, for, if reading instruction were truly integrated within content classes, a complex bureaucracy of separate reading classes would become unnecessary. The consultant would, in effect, be providing continuous inservice training to the other members of the staff, thereby enabling them to teach reading skills effectively within their own classes. The success of a consultant, however, may take time. Thomas (1967), looking back over several years, reported that about three-fourths of the teachers at her school were contributing to the school-wide effort to improve students' reading ability, that she was busy responding to requests for help, and that the test scores of the students had moved upward. Minturn (1971), on the other hand, reported after only one year of inservice sessions and individual consultations with teachers that 40 percent of the teachers would still need considerable help to cause effective change and that the average gain, according to test scores, for eighth graders between the end of seventh grade and end of eighth grade was only .53 years, an unimpressive gain for a year's work. The test results are questionable, however, because the number of eighth graders who took the test in May of 1970 was 272

fewer than the number of seventh graders who took it in May of 1969. Because the group receiving the posttest was, therefore, not the same group which received the pretest, a comparison of results does not form a valid basis for evaluation of the program's success.

Inservice training for teachers, whether provided by a school's own personnel or an outside source, appears to be a promising approach in establishing reading instruction as a part of content instruction (Chapter 3, pp. 36-42). The success of an inservice program must be measured in terms of the degree to which its goals were met. Presumably, the goal of any inservice training in reading provided to the entire faculty of a school would be to bring about reading instruction in the subject areas. In addition to knowing the goals, it is essential that participants feel a need to achieve them. Dramer (1973) and Osburn (1974) each detail an effective inservice simulation session in which teachers are required to read an example of content material, once as an isolated assignment and once as part of a reading instructional activity, after which the teachers more readily understand the need to use similar activities to facilitate reading comprehension in their content classes. Establishing both a goal and the desirability of achieving it should affect positively the degree to which inservice training culminates in a comprehensive reading program providing appropriate instruction to all students at all grade levels in all classes. Because inservice training is aimed directly at teachers and indirectly at students, it is difficult to apply any of the three proposed methods of evaluation to an inservice program itself to make a meaningful evaluation. Although some reports of inservice programs included test results for students whose teachers had participated, these test results were, more often than not, equivocal (Diem

et al., 1981; Singer, 1973; Stanchfield & Wiseman, 1974). A notable exception is the program reported by Reidelberger (1972), in which teachers of content became apprentice teachers of reading for two weeks in the school's reading lab. Test scores showed that freshmen averaged a gain of 1.6 years for a mere nine weeks in the reading lab.

A factor that may mar the success of any program, however, is teacher resistance. This element was present in at least three of the studied programs. Gruber (1973), for example, reported enthusiastically that 50 percent of the faculty had voluntarily attended the inservice demonstration of the SQ3R method (taught to students in English) and agreed to reinforce this method in their content classes. Gruber's enthusiasm notwithstanding, the fact remains that half the faculty did not cooperate. Blossom (1973) reported teacher resistance to the plan of having each teacher prepare and use glossaries as a prereading activity but noted that this resistance was countered with administrative support. [The writer supposes that a decree went out from the central office that all the teachers were to be cooperative, and the rebellion was quashed.] Schleich (1971) reported that an inservice class to help content teachers learn how to utilize reading instruction in their classes was attended by only a small part of the staff; the majority felt that the school needed more remedial teachers to teach reading while they taught content classes. Hence, not all teachers are ready to teach reading as part of content instruction, and therefore, otherwise well-conceived programs may be only partially successful.

Having evaluated the various types of programs by comparing each type to a comprehensive model, by examining some of the test results, and by noting available subjective observations, the writer concludes

that the most promising approaches appear to be the school-wide use of a single technique of reading instruction, the use of a reading consultant, and inservice training programs. In addition to evaluating each type of program by comparing it to an external model, one can analyze each program and compare it to others to note common elements and determine whether these establish the existence of any trends in the area of reading in the content fields. An analysis of the data does reveal that there are two elements which are common to a significant number of the programs studied: the close alliance of reading instruction to only one content area, English, and the extensive use of inservice training.

The relationship of reading instruction to the area of English occurs in a number of ways. One way is giving English credit for a separate reading class. Weber and Brown (1976), Arnold (1976), and Loeffler (1976) reported respectively that a reading lab class for freshmen, a remedial reading class for freshmen, and reading lab experiences earned English credit for their participants. Sometimes such a separate reading class is simply considered one of the English electives. Loeffler (1976), Kummer (1976), and Hodges (1974) each reported the existence of one or more electives in their respective schools. Sometimes experiences in a reading lab are made a part of English class. Groomes (1966), Wayne (1980), and Berkey (1967) each reported the existence of such lab experiences within English classes. Two examples of grouping according to reading ability within the English curricula were reported (Bosanko, 1975; Racette, 1968). Another connection between reading instruction and the English department is the assignment of English teachers to teach reading classes. Rossman (1977) reported that 15 English teachers, few of whom had ever had so much as one

course in reading skills training, were assigned as part of their class load to reading classes in the reading lab. They did, however, receive inservice training. The reading staff of Bloom Township High School consisted of seven of the fifty teachers in the English department (Model Programs: Reading; Bloom Township, 1971). Shapiro and Kriftcher (1976) reported that at August Martin High School (New York City), it was the English department that provided reading instruction. Even the six-member team of teachers for poor seventh grade readers in Keokuk, Iowa, included three language arts teachers but only one each from three other content areas (Model Programs: Reading; School-Within-A-School, 1971). And it was an English teacher who taught the SQ3R method to her classes before enlisting the help of other teachers to reinforce this skill (Gruber, 1973). The evidence clearly shows that, of all the content subjects, English is most often the one through which reading instruction takes place. This is also supported by Hill (1975), whose survey of schools in western New York showed that of the schools reporting content-oriented reading instruction, 86 percent reported that it took place in English. This trend is even supported by the states' teacher certification requirements (Thomas & Simpson, 1979). While nineteen states require training in reading education for all secondary teachers, an additional six states require this for English teachers only and one requires it for both English and social studies teachers. English, therefore, appears to be the one content area in which reading instruction is most likely to develop and expand in the future.

The other trend noticed by the writer is the wide use of inservice training as the means of encouraging content area teachers to provide reading instruction in their respective areas. In addition to those

programs specifically categorized as inservice training programs in Chapter 3, pp. 36-42, a number of the other programs studied included inservice training as a significant component. Rossman (1977), for example, noted that inservice training was given to the 15 English teachers assigned to teach reading at the Richard C. Lee High School in New Haven, Connecticut. Another example is that of Operation READS, which included two weeks of training in reading instruction and writing appropriate materials during summer vacation. This inservice workshop prepared the content teachers for the designated week of school-wide training in the use of the SQ3R method (Dramer, 1973). Blossom (1973) reported an additional example of inservice training, which included both a one-week summer workshop and a four-hour inservice session when school opened, that preceded a school-wide use of the "glossing" technique. And, of course, the role of reading consultant includes providing some form of continuous and on-going (though frequently informal and individualized) inservice training for teachers served by the consultant (Minturn, 1971; Thomas, 1967). Both the frequency with which inservice training programs are mentioned in the literature and their potential usefulness in changing the attitudes and instructional practices of secondary content teachers suggest that such programs will likely be a major future force in increasing content teachers' awareness of the possibilities for reading instruction within their classes.

Hence, the tendency to limit secondary reading instruction to the English department and the use of inservice programs to educate content teachers in reading instruction are two trends in the field of content area reading instruction, each of which can itself be evaluated to determine whether it should be encouraged or stifled.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

Six questions have guided this study. In answering them, it has been noted that, historically, the idea of teaching reading in the content areas can be traced back to the 1930's, but the principal type of reading instruction in the nation's secondary schools has been remedial with an expansion of developmental reading in the 1950's and 1960's. It has been shown that, although declining test scores, the relationship of reading to delinquency and academic success, and the need for functional literacy each underscore the importance of reading instruction in secondary schools, the departmentalization of the schools and teachers' lack of training have inhibited the union of reading and content instruction. Despite these two factors, several types of programs were developed during the 1960's and 1970's to fuse in varying degrees reading instruction and content instruction, but the percentage of schools involved was small. Many of the programs which developed contained successful elements, but these programs were generally not comprehensive. Two trends in these reading programs were noted: (a) making the teaching of reading the responsibility of English departments and (b) the use of inservice education to train content teachers how to teach reading by using their own content materials. But do these trends represent the direction in which content reading instruction should move?

The trend toward assigning reading instruction to the English department is probably more undesirable than desirable. To the extent

that this trend involves English teachers in teaching reading, it is good; to the extent that it inhibits other content teachers from doing so, it is bad. Even within the English department, however, reading can easily become a separate class involved with isolated reading skills which do not get transferred or applied even to literature, the traditional content of the English curricula. Furthermore, to remove students from the regular English program to receive credit for reading is a questionable curricular practice. While few English teachers would deny the importance of reading, scheduling a reading class in place of English strongly implies that regular English classes are relatively unimportant and can be missed without interfering with the student's general language development. And, of course, allying the reading program with the English department sends the message to the other departments that reading is not their concern, for the English department will handle it. Certainly English teachers must accept their fair share of responsibility for teaching reading, but it should be integrated and fused with the regular English curriculum just as it should also be a part of the curricula of the other departments.

The trend toward inservice training in reading instruction for content teachers, on the other hand, appears to be quite desirable. Whether provided by the school's own personnel (e.g., a reading consultant) or by an outside agency (e.g., a college), such training may serve not only to develop positive teacher attitudes toward reading instruction in content classes but also to provide the teacher with the knowledge and skills that would enable him or her to teach more effectively by applying such knowledge and skills to the content curricula. In effect, a well-planned inservice training program can re-

mediate the deficiencies which may have been left by inadequate preservice training in reading education.

If inservice training in reading instruction is essential for those teachers already at work in the nation's classrooms, it follows that preservice training in reading is essential for those persons preparing to enter the teaching profession. If current teachers can be retrained to utilize reading instruction in their classes and future teachers are prepared to accept the responsibility for teaching reading within their chosen subject areas, genuine progress toward the goal of fusing reading instruction with content materials would, at least, become more probable.

Unfortunately, inservice training programs, though increasingly utilized, are sporadic, and today's preservice education does not necessarily involve any courses in the teaching of reading. The catalyst that may bring about needed improvement in such training is certification requirements. As increasing numbers of states require at least one course in reading education before certification will be granted, increasing numbers of teacher training institutions will make such courses available to the prospective secondary teacher. Evidence of a trend by state certification agencies toward the requirement of training in reading education for all certified secondary teachers has been previously presented (Chapter 2, pp. 23-24). If the trend continues, there will come a time when all states have such a requirement. Also, in order to assure that already certified teachers receive appropriate training, it could be mandated that they meet the requirement prior to the renewal or extension of their certificates. State regulation, therefore, may be the means by which change in the teaching of reading within content areas is effected. Although such change would be rela-

tively simple, it is one that is long overdue. It may be appropriate at this point, therefore, to review the rationale for making such an adaptation in teaching practices as presented by a forerunner in the field of secondary reading instruction:

> Pupils encounter many reading activities for which they are not prepared by the training received in reading classes. Both the pupil who is retarded in reading and the pupil who has developed his general reading attainments to a satisfactory level may be handicapped by difficulties growing out of these reading activities.
>
> It is generally recognized that the reading activities essential to effective study differ notably in various subjects. Each subject possesses a specific vocabulary which the reader must be able to use and understand; each subject employs its own signs, symbols, maps, charts, graphs, tables, and other forms of thought representation; the reading activities of each subject are governed by purposes peculiar to it; and the techniques of teaching different subjects create needs for different forms and applications of reading. . . . In view of the many types and applications of reading employed in the study of different subjects, it is essential that attention be given to the specific reading skills of each subject.
>
> In the upper grades and high school teachers frequently overlook opportunities for developing reading skills because their attention is centered quite naturally on the content of their own subjects and not on reading. However, in spite of the neglect of conscious direction of reading activities, the pupils' habits of study are modified greatly by the way in which materials for study are planned and presented by the teacher. Unguided, the pupils may or may not develop effective reading habits. On the other hand, the alert teacher, conscious of her control of the reading process of her pupils, may make guidance in reading a distinct asset to them. (McCallister, 1936, pp. 189-190)

The words may be almost half a century old, but the simple goal of providing guidance to students' reading of content materials is still a worthy one, and the reasons behind it are still valid.

But who will bell the cat? Will it be state certification agencies who mandate standards for secondary teachers? Will it be teacher training institutions, which could set standards for preservice training higher than those currently mandated? Or will it be the administration

and staff within the local secondary school who effect change through meaningful inservice training?

In all probability, it will take all three to lay a foundation sturdy enough to support our ethereal castle of reading instruction in the content areas, thereby preventing its collapse.

While the conclusion that inservice training and preservice training in response to teacher certification requirements will likely increase the number of teachers who teach reading in the content areas derives directly from the content of this study, peripheral aspects of the study give rise to a few recommendations.

One recommendation derives from the frustration encountered in searching for descriptions of reading programs. There seems to be a disproportionate number of journal articles and conference papers on the subject of secondary reading instruction that are written by college personnel as opposed to secondary teachers. The literature is replete with how-to-do-it articles written by persons who, quite possibly, have never done it. Some of these persons might better help with the missing foundations rather than add more ivory towers to their ethereal castles. Secondary teachers, on the other hand, though not infected by the "publish or perish" syndrome that plagues their college counterparts, probably could and should contribute more to the professional literature by providing descriptive reports of the programs and techniques they are developing in the field. Such contributions by secondary teachers may restore greater balance between that which is real and possible and that which is ideal but improbable.

However, even those descriptions of programs that are authored by secondary teachers (though frequently with a collegiate co-author)

seem imbued with an aura of unreality. The school involved seems just a little too well-organized; the students seem just a little too perfect; the teacher, a trifle too dedicated; and the program, just a little too successful. Surely the problems that arose were not solved *quite so simply or quickly. Is it the writers who distort reality?* Or is it editors, who select only the most sterile and pristine reports for publication? The writer not only recommends that accounts of programs be more plausibly described, but also recommends that an account of a genuine reading program failure occasionally be allowed to find its way into the literature. If it is true that we can learn from the mistakes of others, then access to accounts of failure can have value.

Indeed, the writer recommends as a possibility for future research that someone undertake to do a serious study of reading programs that failed and analyze the factors that precipitated the failure. A corollary research project would be to cull from the literature a number of programs that were written about as successes and determine whether these programs are still in operation, and if not, why not. It would be of some interest to know what factors could bring about the termination of a successful program. The literature contains many accounts of how and why programs get started; it might also be useful to learn how and why some programs are terminated.

Another area that gives rise to a recommendation is the seemingly chaotic development of reading programs. The study seemed to show that no two programs are strictly alike. Aside from the identification procedures (a standardized test followed by the segregation of those untouchables reading two or more years below grade level), numerous programs seem to have very little in common with any others. With

every school developing its own program from scratch, there must be great duplication of effort as each discovers anew what works and what doesn't. Of course, strict standardization would be incompatible with innovation; the seeming need for every school to be innovative, however, is unclear. Surely enough is now known about reading programs so that some guidelines might be proposed and endorsed. The International Reading Association, for example, could lend its prestige to a move toward a degree of uniformity. Or, in addition to such requirements as having English and social studies at every grade level, more state boards of education could set standards for reading programs that would give direction to those schools which see the need for adding reading instruction to the secondary curricula. After all, there is nothing quite like a mandate from a higher authority to get things done.

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